

PCT

REQUEST

The undersigned requests that the present international application be processed according to the Patent Cooperation Treaty.

For receiving Office use only

PCT/ SE 99 / 01664
International Application No.

International Filing Date 22-08-1999

The Swedish Patent Office
PCT International Application

Name of receiving Office and "PCT International Application"

Applicant's or agent's file reference
(if desired) (12 characters maximum) PB/GB 42234

Box No. I TITLE OF INVENTION
Golf training device

Box No. II APPLICANT

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

Homerange KB
Kardenvägen 61
SE - 461 38 TROLLHATTAN
Sweden

☐ This person is also inventor.

Telephone No.

Facsimile No.

Teleprinter No.

State (that is, country) of nationality: SE

State (that is, country) of residence: SE

This person is applicant for the purposes of: ☐ all designated States ☒ all designated States except the United States of America ☐ the United States of America only ☐ the States indicated in the Supplemental Box

Box No. III FURTHER APPLICANT(S) AND/OR (FURTHER) INVENTOR(S)

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

SKALEN, John
Drottninggatan 8
SE - 461 32 TROLLHATTAN
Sweden

This person is:

☐ applicant only

☒ applicant and inventor

☐ inventor only (If this check-box is marked, do not fill in below.)

State (that is, country) of nationality: SE

State (that is, country) of residence: SE

This person is applicant for the purposes of: ☐ all designated States ☐ all designated States except the United States of America ☒ the United States of America only ☐ the States indicated in the Supplemental Box

☐ Further applicants and/or (further) inventors are indicated on a continuation sheet.

Box No. IV AGENT OR COMMON REPRESENTATIVE; OR ADDRESS FOR CORRESPONDENCE

The person identified below is hereby/has been appointed to act on behalf of the applicant(s) before the competent International Authorities as: ☒ agent ☐ common representative

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.)

BJELKSTAM, Peter; HAGSTRÖM, Leif; LARFELDT, Helene;
LINDBERG, Åke; LINDÉN, Stefan; ROSENQUIST, Per Olof;
SANDSTRÖM, Staffan; SEDVALL, Bengt; STRANDIN, Heléne
BERGENSTRÄHLE & LINDVALL AB
P O Box 17704
SE - 118 93 STOCKHOLM / Sweden

Telephone No.

+46 8 462 05 30

Facsimile No.

+46 8 462 06 40

Teleprinter No.

☐ Address for correspondence: Mark this check-box where no agent or common representative is/has been appointed and the space above is used instead to indicate a special address to which correspondence should be sent.

Box No.V DESIGNATION OF STATES

22-09-1999

The following designations are hereby made under Rule 4.9(a) (mark the applicable check-boxes; at least one must be marked):

Regional Patent

- ☐ **AP ARIPO Patent:** GH Ghana, GM Gambia, KE Kenya, LS Lesotho, MW Malawi, SD Sudan, SL Sierra Leone, SZ Swaziland, UG Uganda, ZW Zimbabwe, and any other State which is a Contracting State of the Harare Protocol and of the PCT
- ☐ **EA Eurasian Patent:** AM Armenia, AZ Azerbaijan, BY Belarus, KG Kyrgyzstan, KZ Kazakhstan, MD Republic of Moldova, RU Russian Federation, TJ Tajikistan, TM Turkmenistan, and any other State which is a Contracting State of the Eurasian Patent Convention and of the PCT
- ☒ **EP European Patent:** AT Austria, BE Belgium, CH and LI Switzerland and Liechtenstein, CY Cyprus, DE Germany, DK Denmark, ES Spain, FI Finland, FR France, GB United Kingdom, GR Greece, IE Ireland, IT Italy, LU Luxembourg, MC Monaco, NL Netherlands, PT Portugal, SE Sweden, and any other State which is a Contracting State of the European Patent Convention and of the PCT
- ☐ **OA OAPI Patent:** BF Burkina Faso, BJ Benin, CF Central African Republic, CG Congo, CI Côte d'Ivoire, CM Cameroon, GA Gabon, GN Guinea, GW Guinea-Bissau, ML Mali, MR Mauritania, NE Niger, SN Senegal, TD Chad, TG Togo, and any other State which is a member State of OAPI and a Contracting State of the PCT (if other kind of protection or treatment desired, specify on dotted line)

National Patent (if other kind of protection or treatment desired, specify on dotted line):

- | | |
|--|--|
| <input type="checkbox"/> AE United Arab Emirates | <input type="checkbox"/> LR Liberia |
| <input type="checkbox"/> AL Albania | <input type="checkbox"/> LS Lesotho |
| <input type="checkbox"/> AM Armenia | <input type="checkbox"/> LT Lithuania |
| <input type="checkbox"/> AT Austria | <input type="checkbox"/> LU Luxembourg |
| <input checked="" type="checkbox"/> AU Australia | <input type="checkbox"/> LV Latvia |
| <input type="checkbox"/> AZ Azerbaijan | <input type="checkbox"/> MD Republic of Moldova |
| <input type="checkbox"/> BA Bosnia and Herzegovina | <input type="checkbox"/> MG Madagascar |
| <input type="checkbox"/> BB Barbados | <input type="checkbox"/> MK The former Yugoslav Republic of Macedonia |
| <input type="checkbox"/> BG Bulgaria | <input type="checkbox"/> MN Mongolia |
| <input type="checkbox"/> BR Brazil | <input type="checkbox"/> MW Malawi |
| <input type="checkbox"/> BY Belarus | <input type="checkbox"/> MX Mexico |
| <input checked="" type="checkbox"/> CA Canada | <input checked="" type="checkbox"/> NO Norway |
| <input type="checkbox"/> CH and LI Switzerland and Liechtenstein | <input checked="" type="checkbox"/> NZ New Zealand |
| <input checked="" type="checkbox"/> CN China | <input type="checkbox"/> PL Poland |
| <input type="checkbox"/> CU Cuba | <input type="checkbox"/> PT Portugal |
| <input type="checkbox"/> CZ Czech Republic | <input type="checkbox"/> RO Romania |
| <input type="checkbox"/> DE Germany | <input type="checkbox"/> RU Russian Federation |
| <input type="checkbox"/> DK Denmark | <input type="checkbox"/> SD Sudan |
| <input type="checkbox"/> EE Estonia | <input type="checkbox"/> SE Sweden |
| <input type="checkbox"/> ES Spain | <input type="checkbox"/> SG Singapore |
| <input type="checkbox"/> FI Finland | <input type="checkbox"/> SI Slovenia |
| <input type="checkbox"/> GB United Kingdom | <input type="checkbox"/> SK Slovakia |
| <input type="checkbox"/> GD Grenada | <input type="checkbox"/> SL Sierra Leone |
| <input type="checkbox"/> GE Georgia | <input type="checkbox"/> TJ Tajikistan |
| <input type="checkbox"/> GH Ghana | <input type="checkbox"/> TM Turkmenistan |
| <input type="checkbox"/> GM Gambia | <input type="checkbox"/> TR Turkey |
| <input type="checkbox"/> HR Croatia | <input type="checkbox"/> TT Trinidad and Tobago |
| <input type="checkbox"/> HU Hungary | <input type="checkbox"/> UA Ukraine |
| <input type="checkbox"/> ID Indonesia | <input type="checkbox"/> UG Uganda |
| <input type="checkbox"/> IL Israel | <input checked="" type="checkbox"/> US United States of America |
| <input type="checkbox"/> IN India | <input type="checkbox"/> UZ Uzbekistan |
| <input type="checkbox"/> IS Iceland | <input type="checkbox"/> VN Viet Nam |
| <input checked="" type="checkbox"/> JP Japan | <input type="checkbox"/> YU Yugoslavia |
| <input type="checkbox"/> KE Kenya | <input checked="" type="checkbox"/> ZA South Africa |
| <input type="checkbox"/> KG Kyrgyzstan | <input type="checkbox"/> ZW Zimbabwe |
| <input type="checkbox"/> KP Democratic People's Republic of Korea | |
| <input type="checkbox"/> KR Republic of Korea | |
| <input type="checkbox"/> KZ Kazakhstan | |
| <input type="checkbox"/> LC Saint Lucia | |
| <input type="checkbox"/> LK Sri Lanka | |

Check-boxes reserved for designating States which have become party to the PCT after issuance of this sheet:

Precautionary Designation Statement: In addition to the designations made above, the applicant also makes under Rule 4.9(b) all other designations which would be permitted under the PCT except any designation(s) indicated in the Supplemental Box as being excluded from the scope of this statement. The applicant declares that those additional designations are subject to confirmation and that any designation which is not confirmed before the expiration of 15 months from the priority date is to be regarded as withdrawn by the applicant at the expiration of that time limit. (Confirmation of a designation consists of the filing of a notice specifying that designation and the payment of the designation and confirmation fees. Confirmation must reach the receiving Office within the 15-month time limit.)

Box No. VI PRIORITY CLAIM		<input type="checkbox"/> Further priority claims are indicated in the Supplemental Box.		
Filing date of earlier application (day/month/year)	Number of earlier application	Where earlier application is:		
		national application: country	regional application: regional Office	international application: receiving Office
item (1) 22 September 1998 22/09/98	9803213-9	Sweden		
item (2)				
item (3)				

☒ The receiving Office is requested to prepare and transmit to the International Bureau a certified copy of the earlier application(s) (only if the earlier application was filed with the Office which for the purposes of the present international application is the receiving Office) identified above as item(s): (1)

* Where the earlier application is an ARIPO application, it is mandatory to indicate in the Supplemental Box at least one country party to the Paris Convention for the Protection of Industrial Property for which that earlier application was filed (Rule 4.10(b)(ii)). See Supplemental Box.

Box No. VII INTERNATIONAL SEARCHING AUTHORITY

Choice of International Searching Authority (ISA)
(if two or more International Searching Authorities are competent to carry out the international search, indicate the Authority chosen; the two-letter code may be used):

ISA/ SE

Request to use results of earlier search; reference to that search (if an earlier search has been carried out by or requested from the International Searching Authority):

Date (day/month/year)

Number

Country (or regional Office)

Box No. VIII CHECK LIST; LANGUAGE OF FILING

This international application contains the following number of sheets:

request 3
description (excluding sequence listing part) 5
claims 2
abstract 1
drawings 1
sequence listing part of description :

Total number of sheets 12

This international application is accompanied by the item(s) marked below:

1. ☒ fee calculation sheet
2. ☐ separate signed power of attorney
3. ☐ copy of general power of attorney; reference number, if any:
4. ☐ statement explaining lack of signature
5. ☐ priority document(s) identified in Box No. VI as item(s):
6. ☐ translation of international application into (language):
7. ☐ separate indications concerning deposited microorganism or other biological material
8. ☐ nucleotide and/or amino acid sequence listing in computer readable form
9. ☐ other (specify):

Figure of the drawings which should accompany the abstract:

Language of filing of the international application: Swedish

Box No. IX SIGNATURE OF APPLICANT OR AGENT

Next to each signature, indicate the name of the person signing and the capacity in which the person signs (if such capacity is not obvious from reading the request).

Stockholm September 22, 1999

Homerange KB et al,
through:

Peter Bjelkstrom

For receiving Office use only

1. Date of actual receipt of the purported international application:	22-09-1999	2. Drawings: <input checked="" type="checkbox"/> received: <input type="checkbox"/> not received:
3. Corrected date of actual receipt due to later but timely received papers or drawings completing the purported international application:		
4. Date of timely receipt of the required corrections under PCT Article 11(2):		
5. International Searching Authority (if two or more are competent): ISA/ SE	6. <input type="checkbox"/> Transmittal of search copy delayed until search fee is paid.	

For International Bureau use only

Date of receipt of the record copy by the International Bureau:

10 NOVEMBER 1999

(10.11.99)



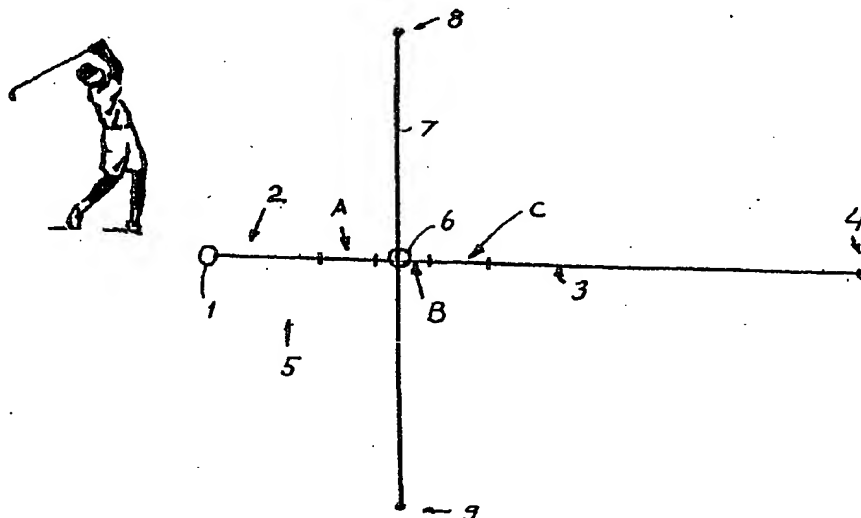
PCT

WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁷ : A63B 69/36	A1	(11) International Publication Number: WO 00/20079 (43) International Publication Date: 13 April 2000 (13.04.00)
(21) International Application Number: PCT/SE99/01664 (22) International Filing Date: 22 September 1999 (22.09.99) (30) Priority Data: 9803213-9 22 September 1998 (22.09.98) SE (71) Applicant (for all designated States except US): HOME- RANGE KB [SE/SE]; Kardenvägen 61, S-461 38 Trollhättan (SE). (72) Inventor; and (75) Inventor/Applicant (for US only): <u>SKÅLÉN</u> , John [SE/SE]; Drottninggatan 8, S-461 32 Trollhättan (SE). (74) Agents: BJELKSTAM, Peter et al.; Bergenstråhle & Lindvall AB, P.O. Box 17704, S-118 93 Stockholm (SE).	(81) Designated States: AU, CA, CN, JP, NO, NZ, US, ZA, European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments. In English translation (filed in Swedish).	

(54) Title: GOLF TRAINING DEVICE



(57) Abstract

The invention relates to an arrangement, comprising a golf ball (1) which is used during the tee strike training and which, after the strike, is automatically returned with the aid of a substantially rigid line (3) secured to the ball (1) and, at its opposite, free end adapted to be anchored in the ground at a predetermined distance in front of the ball, and a ring (6) slidable along said line (3) and also on an elastic line (7), extending substantially across said rigid line (3), for cooperation with said elastic line (7) the free ends (8, 9) of which retaining the rigid line (3) are resiliently halted and then returned. The rigid line (3) does, along its front portion (5), exhibit marked sections (A-C) which indicate the distance from the ball (1) to the ring (6), interconnecting the lines, and to the crossing elastic line (7) thereby informing the player about which club he is to use to realize the basic function of the arrangement, namely that the ball will return to the tee location following a correct and perfect strike.

22-09-1999

1

Golfträningsredskap

Föreliggande uppfinning hänför sig ett golfträningsredskap och närmare bestämt en anordning vid en golfboll för användning i samband med utslag under träning, varvid bollen efter utslaget automatiskt returneras med hjälp av en vid bollen fäst, i huvudsak stum lina, vilken vid sin motsatta, fria ände är förankringsbar i marken ett förutbestämt avstånd framför bollen samt en utmed linan glidbart anordnad ring, vilken även är glidbart anordnad på och samverkbar med en i huvudsak tvärs den stumma linan sig sträckande, elastisk lina, vars fria ändar är fast förankringsbara i marken, varvid efter bollens utslag denna via ringen och den bollen fasthållande, stumma linan fjädrande stannas upp för att därefter automatiskt returneras.

På marknaden idag finns ett antal kända anordningar med gummisnoddar eller gummiband, som används för t.ex. tennis träning och även för att träna utslag av golfbollar. Vid dessa arrangemang har man ej kontroll över returandet av bollen ifråga, eftersom utslagets kraft bestämmer hastigheten hos den returnerande bollen och av denna anledning händer alltför ofta skador med bollar, som träffar den person som tränar eller åskådare i närheten av utslagsplatsen. På marknaden finns även varianter av lätta plastbollar, en del perforerade, för att träna golfsving och bollträff. Dessa ger dock icke alls en realistisk känsla och bollträff och det är nästan omöjligt att avgöra om man får en bra bollträff eller ej.

22-09-1999

2

Syftet med föreliggande uppfinning är att åstadkomma en anordning vid en golfboll av ovannämnt slag, med hjälp av vilken anordning man erbjuds möjligheten att på ett säkert och realistiskt sätt träna golfsving och bollträff och vilken anordning i motsats till de kända anordningarna returnerar bollen på ett kontrollerbart sätt, d.v.s. så att den i slutet av returnerandet för bollen tillbaka mot spelaren i marknivå och åter till utslagsplatsen samtidigt som man med hjälp av märkta områden över den stumma linans främre parti, som anger bollens avstånd till den linorna sammanhållande ringen och den tvärgående elastiska linan, får en indikation om vilken typ av klubba som skall användas. När man skall träna med en klubba av typen driver, flyttar man t.ex. den stumma linans markfäste närmare utslagsplatsen för bollen, så att avståndet mellan bollen och den tvärgående linan blir större. Skall man träna med en järnklubba t.ex. nummer sex, flyttar man i stället markfästet längre bort från utslagsplatsen, så att avståndet mellan bollen och den tvärgående linan blir mindre. Det som är avgörande för träningsredskapets basfunktion är nämligen att bollen returneras till utslagsplatsen, vilket samtidigt betyder, att spelaren slagit ett korrekt slag. De för uppfinningen utmärkande särdragen finns angivna i efterföljande patentkrav.

Tack vare uppfinningen har man åstadkommit en anordning, som på ett utmärkt sätt fyller sitt syfte samtidigt som den dessutom är både enkel och billig att tillverka. Då en riktig golfboll används i kombination med att anordningen enligt uppfinningen ger en kontrollerbar retur får man en mycket realistisk känsla av bollträffen, vilket är helt avgörande för träningen. Genom att bollen är fäst vid en i huvudsak stum lina, som sträcker sig från golf-

22-09-1999

bollen fram till en markförankring och som via en ring av företrädesvis metall är glidbart lägesfixerad vid den tvärgående elastiska linan, åstadkommes nämnda kontrollerade utslag och returnerande av golfbollen ifråga. Vid ett utslag fångar den tvärgående, elastiska linan eller gummilinan upp bollen i utslagsriktningen, varvid denna övergår i en uppfångningsriktning, som utgör en dragparabel, som är annorlunda än nämnda utslagsriktning. Denna dragparabel utgörs av en nedåtriktad returnering mot marken av bollen, varvid den elastiska linan håller den stumma linan, vid vilken bollen är fäst, nere och drar bollen tillbaka till marknivå utefter marken fram till utgångsläget vid utslagsplatsen. Den fjädrande linans sammankoppling med den längsgående, styva linan tvingar således utslagen boll att ändra riktning i en tidigare nedåtgående bana och lagrar därmed energi i den fjädrande linan för returneringen av bollen. Den stumma linan, vid vilken bollen är fäst, uppvisar märkta områden framför genomföringen vid metallringen på den elastiska linan, så att spelare som skall träna med en driver på ett enkelt sätt kan förflytta golfbollen med tillhörande stumma lina längre ifrån den elastiska linan och när det är fråga om träning med järnklubba, kan golfbollens avstånd till metallringen minskas antingen genom förflyttning av den tvärgående linan relativt bollen eller förflyttning av den stumma linans markfäste. Man kan med andra ord, såsom nämnts ovan, enkelt justera avstånd mellan boll och metallring beroende på vilken golfklubba man använder, då olika vinklar på klubblan ger olika höjd på bollbana och detta ökar ytterligare möjligheten att avgöra, om man gjort ett bra slag. För att lätt kunna byta golfboll kan densamma med hjälp av en fästring vara löstagbart fastgjord vid den stumma linan. Vidare har man genom använd-

22 -09- 1999

4

ning av en ring för sammankoppling av den stumma linan med den elastiska linan åstadkommit den fördelen att det är helt omöjligt för en utslagen boll att rulla under den tvärgående linan och därmed icke fångas upp av denna. Slutligen måste även framhållas, att golfträningsredskapet enligt uppfinningen kräver endast en liten yta, som dessutom är definierbar, då den lina som bollen är fastgjord i, är i huvudsak stum.

Uppfinningen beskrivs närmare nedan under hänvisning till bifogade ritning, vilken schematiskt visar en anordning vid en golfboll för användning i samband med utslag under träning och vid vilken bollen efter utslaget automatiskt returneras till utslagsplatsen.

Såsom framgår av ritningen, är en boll 1 fastgjord vid ena änden 2 av en stum lina 3, vilken i sin tur vid sin fria ände 4 är förankrad i marken. Linans 3 infästning i bollen 1 är utförd på sådant sätt, att genomborrning icke är nödvändig utan kan ske med expanderorgan, exempelvis i form av en bult eller kanthugget fästelement i bollkärnans centrum. Expanderbultens eller fästelementets fria ände har ett fästorgan för samverkan med den fästing som används för en löstagbar fastsättning av bollen 1 vid den stumma linan 3. Linan kan även vara invulkad i bollkärnan, d.v.s. integrerad med densamma. Vidare uppvisar infästningen i bollen 1 ett fästhål, vars diameter är större genom bollens 1 skal än genom bollkärnans centrum, vilket förhindrar, att infästningskrafter vid utslag icke överförs till skalet och därmed förorsakar sprickbildning i skalet.

22 -09- 1999

5

Över den stumma linans 3 parti 5 närmast bollen 1 finns en på densamma glidbart anordnad ring 6, tillverkad av ett lämpligt material, exempelvis plast eller metall, vilken även är glidbart anordnad på och samverkar med en i huvudsak tvärs den stumma linan 3 sig sträckande, elastisk lina 7. Denna elastiska lina 7 kan utgöras av en gummilina och är med sina fria ändar 8, 9 fixerbar i marken. Eftersom metallringen 6 omsluter både den stumma linan 3 och den elastiska linan 7, kan en returnerande golfboll 1 icke okontrollerbart komma tillbaka under den elastiska linan 7 och träffa spelaren eller någon åskådare.

I det visade föredragna exemplet har den stumma linan 3 en längd av cirka sju meter och den tvärgående, elastiska linan 7 en längd av cirka fem meter. Metallringen 6, genom vilken dessa bägge linor löper, befinner sig på ett avstånd fram till golfbollen 1, vilket är beroende av den klubba man valt att träna med och i det visade exemplet har ett avstånd med hjälp av markeringarna på linan 3 valts till cirka två meter. Avståndet från bollen och fram till den tvärgående linan 7 är således markerat på den stumma linan 3 med områden A - C, som kan ha färgerna blått A, vitt B och gult C, med hjälp av vilka golfbollens lägesplacering relativt metallringen 6 och den tvärgående linan 7 lätt kan bestämmas och vilket anger vilken klubbtyp man ska träna med. Träningsredskapet enligt uppfinningen är självmarkerande i det att, då man slår ett bra slag, bollen kommer att kontrollerat returneras till utslagsplatsen och, då man slår ett dåligt slag, bollen kommer att hamna en längre eller kortare sträcka ifrån utslagsplatsen.

22-09-1999

Patentkrav

1. Anordning vid en golfboll för användning i samband med utslag under träning, varvid bollen (1) efter utslaget automatiskt returneras med hjälp av en vid bollen (1) fäst, i huvudsak stum lina (3), vilken vid sin motsatta, fria ände är förankringsbar i marken ett förutbestämt avstånd framför bollen samt en utmed linans (3) glidbart anordnad ring (6), vilken även är glidbart anordnad på och samverkbar med en i huvudsak tvärs den stumma linan (3) sig sträckande, elastisk lina (7), vars fria ändar (8, 9) är fast förankringsbara i marken, varvid efter bollens (1) utslag denna via ringen (6) och den bollen (1) fasthållande, stumma linan (3) fjädrande stannas upp för att därefter returneras, **kännetecknad** av att den stumma linan (3) uppvisar över sitt främre parti (5) märkta områden (A-C), vilka anger bollens (1) avstånd före utslag och med sträckt stum lina (3) till den linorna sammanhållande ringen (6) och den tvärgående, elastiska linan (7), för att härigenom ange för en spelare, vilken typ av klubba som skall användas, vilket är avgörande för anordningens basfunktion, nämligen att returnera bollen till utslagsplatsen då ett korrekt och fullgott slag utförts.

2. Anordning enligt patentkrav 1, **kännetecknad** av att den stumma linan (3) har en längd på cirka sju meter och den tvärgående, elastiska linan (7) en längd på cirka fem meter.

3. Anordning enligt patentkrav 1, **kännetecknad** av att den stumma linans (3) infästning i bollen (1) är utförd medelst ett expanderorgan eller kanthugget fästelement i bollkärnans centrum, som samverkar med en vid linan (3)

22-09-1999

7

fastgjord fåstring.

4. Anordning enligt patentkrav 3, kännetecknad av att infästningen uppvisar ett fästhål i bollen (1), vars diameter är större genom bollens skal än genom bollkärnans centrum.

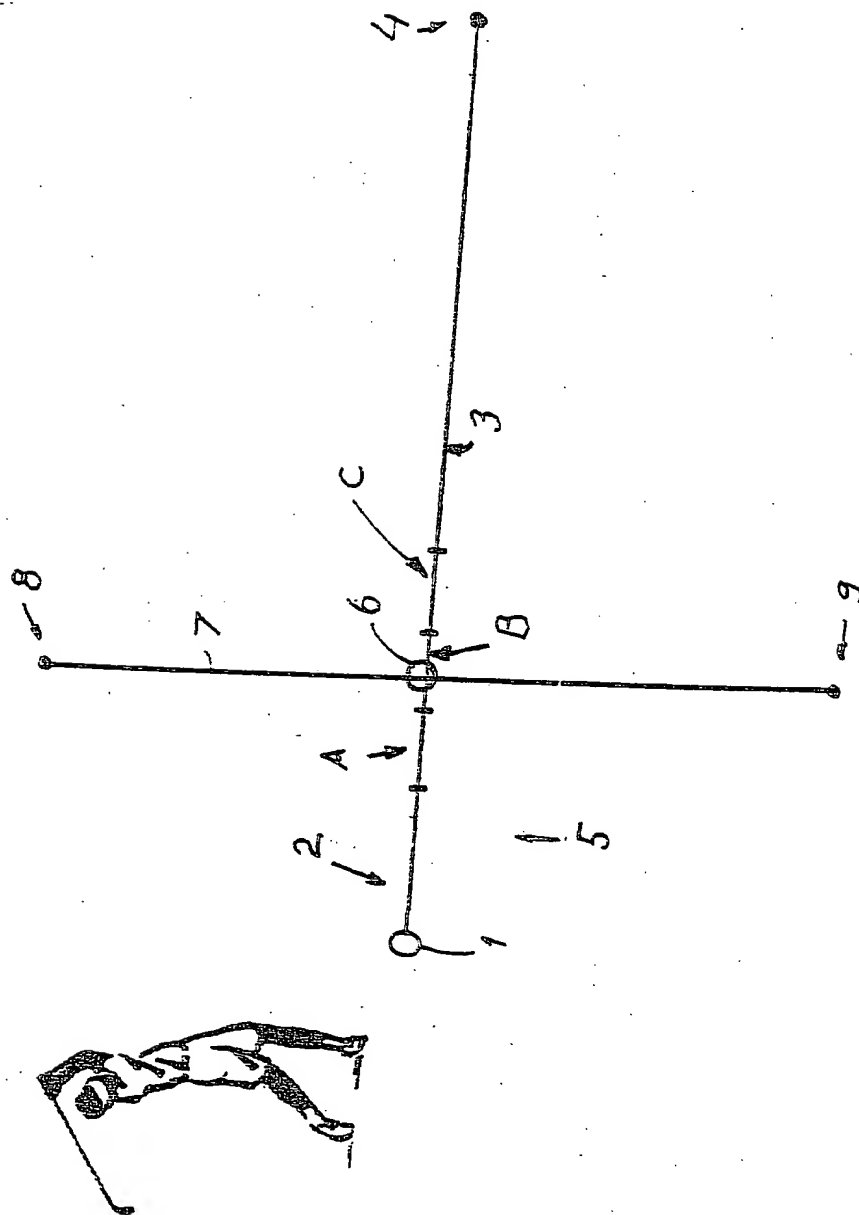
5. Anordning enligt patentkrav 1, kännetecknad av att linan (3) är invulkad i bollkärnan, dvs integrerad med densamma.

Sammandrag

Uppfinningen avser en anordning vid en golfboll för användning i samband med utslag under träning, varvid bollen (1) efter utslaget automatiskt returneras med hjälp av en vid bollen (1) fäst, i huvudsak stum lina (3), vilken vid sin motsatta, fria ände är förankringsbar i marken ett förutbestämt avstånd framför bollen samt en utmed linans (3) glidbart anordnad ring (6), vilken även är glidbart anordnad på och samverkbar med en i huvudsak tvärs den stumma linan (3) sig sträckande, elastisk lina (7), vars fria ändar (8, 9) fasthållande, stumma linan (3) fjädrande stannas upp för att därefter returneras. Den stumma linan (3) uppvisar över sitt främre parti (5) märkta områden (A-C), vilka anger bollens (1) avstånd före utslag och med sträckt stum lina (3) till den linorna sammanhållande ringen (6) och den tvärgående, elastiska linan (7), för att härigenom ange för en spelare, vilken typ av klubba som skall användas, vilket är avgörande för anordningens basfunktion, nämligen att returnera bollen till utslagsplatsen då ett korrekt och fullgott slag utförts.

2 2 -11- 1999

1/
1

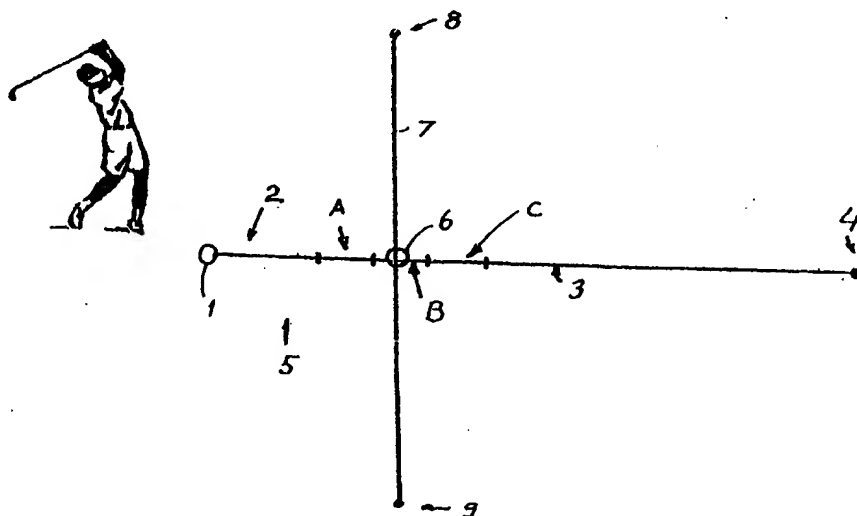


SUBSTITUTE SHEET



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁷ : A63B 69/36	A1	(11) International Publication Number: WO 00/20079 (43) International Publication Date: 13 April 2000 (13.04.00)
(21) International Application Number: PCT/SE99/01664 (22) International Filing Date: 22 September 1999 (22.09.99) (30) Priority Data: 9803213-9 22 September 1998 (22.09.98) SE (71) Applicant (for all designated States except US): HOME-RANGE KB [SE/SE]; Kardanvägen 61, S-461 38 Trollhättan (SE). (72) Inventor; and (75) Inventor/Applicant (for US only): SKÅLÉN, John [SE/SE]; Drottninggatan 8, S-461 32 Trollhättan (SE). (74) Agents: BJELKSTAM, Peter et al.; Bergensträhle & Lindvall AB, P.O. Box 17704, S-118 93 Stockholm (SE).		(81) Designated States: AU, CA, CN, JP, NO, NZ, US, ZA, European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i> <i>In English translation (filed in Swedish).</i>

(54) Title: GOLF TRAINING DEVICE**(57) Abstract**

The invention relates to an arrangement, comprising a golf ball (1) which is used during the tee strike training and which, after the strike, is automatically returned with the aid of a substantially rigid line (3) secured to the ball (1) and, at its opposite, free end adapted to be anchored in the ground at a predetermined distance in front of the ball, and a ring (6) slidable along said line (3) and also on an elastic line (7), extending substantially across said rigid line (3), for cooperation with said elastic line (7) the free ends (8, 9) of which retaining the rigid line (3) are resiliently halted and then returned. The rigid line (3) does, along its front portion (5), exhibit marked sections (A-C) which indicate the distance from the ball (1) to the ring (6), interconnecting the lines, and to the crossing elastic line (7) thereby informing the player about which club he is to use to realize the basic function of the arrangement, namely that the ball will return to the tee location following a correct and perfect strike.

FOR THE PURPOSES OF INFORMATION ONLY

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

AL	Albania	ES	Spain	LS	Lesotho	SI	Slovenia
AM	Armenia	FI	Finland	LT	Lithuania	SK	Slovakia
AT	Austria	FR	France	LU	Luxembourg	SN	Senegal
AU	Australia	GA	Gabon	LV	Latvia	SZ	Swaziland
AZ	Azerbaijan	GB	United Kingdom	MC	Monaco	TD	Chad
BA	Bosnia and Herzegovina	GE	Georgia	MD	Republic of Moldova	TG	Togo
BB	Barbados	GH	Ghana	MG	Madagascar	TJ	Tajikistan
BE	Belgium	GN	Guinea	MK	The former Yugoslav Republic of Macedonia	TM	Turkmenistan
BF	Burkina Faso	GR	Greece			TR	Turkey
BG	Bulgaria	HU	Hungary	ML	Mali	TT	Trinidad and Tobago
BJ	Benin	IE	Ireland	MN	Mongolia	UA	Ukraine
BR	Brazil	IL	Israel	MR	Mauritania	UG	Uganda
BY	Belarus	IS	Iceland	MW	Malawi	US	United States of America
CA	Canada	IT	Italy	MX	Mexico	UZ	Uzbekistan
CF	Central African Republic	JP	Japan	NE	Niger	VN	Viet Nam
CG	Congo	KE	Kenya	NL	Netherlands	YU	Yugoslavia
CH	Switzerland	KG	Kyrgyzstan	NO	Norway	ZW	Zimbabwe
CI	Côte d'Ivoire	KP	Democratic People's Republic of Korea	NZ	New Zealand		
CM	Cameroon			PL	Poland		
CN	China	KR	Republic of Korea	PT	Portugal		
CU	Cuba	KZ	Kazakstan	RO	Romania		
CZ	Czech Republic	LC	Saint Lucia	RU	Russian Federation		
DE	Germany	LI	Liechtenstein	SD	Sudan		
DK	Denmark	LK	Sri Lanka	SE	Sweden		
EE	Estonia	LR	Liberia	SG	Singapore		

GOLF TRAINING DEVICE

5 The present invention relates to a golf training arrangement and, more specifically, to an arrangement comprising a golf ball which is used during the tee strike training and which, after the strike, is automatically returned with the aid of a substantially rigid line secured to the
10 ball and, at its opposite, free end adapted to be anchored in the ground at a predetermined distance in front of the ball, and a ring slidable along said line and also on an elastic line, extending substantially across said rigid line, for cooperation with said elastic line the free ends
15 of which are adapted to be anchored in the ground, whereby said ball is, after the strike, by said ring and said rigid line, to which the ball is secured, resiliently halted and then returned.

20 In the market-place there do today exist a number of prior art arrangements comprising rubber loops or rubber tapes, which are used e.g. for tennis training and also to train golf ball tee strikes. Those arrangements do not provide control over the return of the ball since the force of the
25 strike will determine the speed of the returning ball. For that reason there do often occur accidents caused by balls hitting either the person training or spectators close to the tee. The prior art does also include light plastic balls, some of which are perforated, adapted for training
30 golf swings and ball hits. These do, however, not create a realistic sense and ball hit and it is almost impossible to decide whether the ball hit was good or not.

The object of the present invention is to provide an
35 arrangement of the type mentioned above which comprises a golf ball and which offers the possibility in a safe and realistic way to train golf swings and ball hits. In

contrast to the prior art arrangement this one does return the ball in a way under control, meaning that during the end of the return movement the ball is brought back to the player at ground level and to the tee. At the same time

5 identified sections along the front portion of the rigid line indicate the distance from the ball to the ring interconnecting the lines and to the crossing elastic line, thereby providing an indication about which type of club to be used. When the training is carried out with a

10 club of the driver type, the ground connection of the rigid line is moved for example closer to the tee so that the distance between the ball and the crossing line is increased. If the training is carried out with an iron club, e.g. number six, the ground connection is instead

15 moved to a greater distance from the tee whereby the distance between the ball and the crossing line is reduced. The factor decisive for the basic function of the training arrangement is namely that the ball should be returned to the tee, at the same time indicating that the

20 player has made a correct strike. The features of the invention are set out in the subsequent claims.

Thanks to the invention there has been provided an arrangement which in an excellent manner satisfies its

25 purpose and which, in addition thereto, is simple to use and cheap to manufacture. The combination of use of an actual golf ball and the fact that the arrangement according to the invention offers a control return movement creates a very realistic experience of the ball hit which

30 completely determines the quality of the training. Thanks to the fact that the ball is secured to a substantially rigid line, extending from the golf ball to a ground connection, and which via a ring, preferably a metal ring, is slidably held in position on the crossing elastic line,

35 the above-mentioned controlled strike and return of the ball is achieved. When a strike is made the crossing elastic line, or rubber line, catches the ball travelling

in the strike direction, which is then converted to a catching direction defining a pulling parabola different from the mentioned direction of the strike. This parabola includes a downwardly towards the ground oriented return movement of the ball, the elastic line keeping the rigid line, at which the ball is secured, depressed and pulls the ball back to ground level along the ground and up to the starting position at the tee. Stated in other words, the interconnection between the longitudinal rigid line and the resilient line forces the ball after the strike earlier to change its direction to a downwardly oriented path thereby storing in the resilient line energy for the return of the ball. The rigid line, at which the ball is secured, exhibits marked sections in front of the passage through the metal ring on the resilient line so that a player who wishes to train with a driver club can in a convenient manner move the golf ball and the rigid line connected therewith away from the resilient line. When the training is with an iron club, the distance between the golf ball and the metal ring can be decreased, either by movement of the crossing line relatively the ball or by displacement of the ground connection of the rigid line. Stated in other words and as has been mentioned above, one can in a simple way change the distance between the ball and the metal ring in response to the type of golf club used since clubs with different angles generate ball trajectories of different height. This does further increase the possibility to determine whether the strike was good or not. In order to facilitate change of ball it could be releasably attached to the rigid line via a mounting ring. Further, the use of a ring for the purpose of interconnecting the rigid line with the resilient line provides the advantage that it is completely impossible for a ball in movement to roll in below the crossing line in which case it would not be caught thereby. Finally, it must be stressed that the golf training arrangement according to the invention does only require a small area

which is distinctly defined because the line to which the ball is secured is substantially rigid.

5 The invention will now be described more in detail, reference being made to the drawing which diagrammatically shows an arrangement comprising a golf ball to be used in connection with tee strikes for training purposes and at which the ball is, following the strike, automatically returned to its tee position.

10

As shown in the drawing a ball 1 is secured to the one end 2 of a rigid line 3, which in turn has its free end 4 anchored in the ground. The connection between the line 3 and the ball 1 is made in such a way that the ball must
15 not be given a through hole. Instead, expanding means can be used, e.g. in the shape of a bolt or a corrugated fastener member, in the center of the ball core. The free end of the expander bolt or the fastener member, respectively, has a member cooperating with the ring used for
20 releasable connection of the ball 1 to the rigid line 3. Alternatively, the line could be secured in the ball core by vulcanization, so as to be integrated therewith. Further, a mounting ball in the ball 1 has a greater diameter in the shell of the ball 1 than in the ball core
25 whereby is achieved that lateral forces generated at the strike are not transferred to the shell where they could otherwise cause cracking.

The portion 5 of the rigid line 3 adjacent the ball 1
30 carries a ring 6 slidable thereon and manufactured in a suitable material, for example plastic or metal. It can also slide on and cooperate with a resilient line 7 extending substantially across the rigid line 3. This resilient line 7 can be constituted by a rubber line and it
35 is, at its free ends 8, 9, adapted to be secured to ground. Since the metal ring 6 encloses both the rigid line 3 and the resilient line 7 a returning golf ball 1

cannot, in an uncontrolled way, return below the resilient line 7 and then hit the player or a spectator.

According to the preferred embodiment the length of the
5 rigid line 3 is about seven meters and that of the crossing resilient line 7 about five meters. The metal ring 6, which is traversed by both those lines, is at a distance from the golf ball 1 which depends on the type of club selected for the training. In the example illustrated one
10 has, with the aid of the markings on line 3, chosen a distance of about two meters. The distance from the ball to the crossing line 7 is marked on the rigid line 3 with sections A-C which could have the colours blue A, white B and yellow C. With reference thereto the location of the
15 golf ball relatively the metal ring 6 and the crossing line 7 can easily be determined in response to the type of club used at the training. The training arrangement according to the invention does automatically signal the quality of the strike because, upon a good strike the ball
20 will under control be returned to its tee position whereas, when the strike is bad, the ball will come to rest at a longer or shorter distance from its tee position.

CLAIMS

5 1. An arrangement, comprising a golf ball (1) which is used during the tee strike training and which, after the strike, is automatically returned with the aid of a substantially rigid line (3) secured to the ball (1) and, at its opposite, free end adapted to be anchored in the
10 ground at a predetermined distance in front of the ball, and a ring (6) slidable along said line (3) and also on an elastic line (7), extending substantially across said rigid line (3), for cooperation with said elastic line (7) the free ends (8, 9) of which are adapted to be anchored
15 in the ground, whereby said ball (1) is, after the strike, by said ring (6) and said rigid line (3), to which the ball (1) is secured, resiliently halted and then returned, **c h a r a c t e r i z e d i n** that the rigid line (3) does, along its front portion (5), exhibit marked sections
20 (A-C) which indicate the distance from the ball (1) to the ring (6), interconnecting the lines, and to the crossing elastic line (7) thereby informing the player about which club he is to use to realize the basic function of the arrangement, namely that the ball will returned to the tee
25 location following a correct and perfect strike.

2. An arrangement according to Claim 1, **c h a r a c t e r i z e d i n** that the length of the rigid line (3) is approximately seven meters and that of
30 the crossing, resilient line (7) about five meters.

3. An arrangement according to Claim 1, **c h a r a c t e r i z e d i n** that the rigid line (3) is secured in the ball (1) by expansion means or by the
35 corrugated fastener member in the center of the ball core cooperating with a holding ring attached to line (3).

4. An arrangement according to Claim 3,
c h a r a c t e r i z e d i n that the ball (1) has a
mounting hole the diameter of which is greater through the
shell of the ball than through the center of the ball
5 core.

5. An arrangement according to Claim 1,
c h a r a c t e r i z e d i n that the line (3) is
integrated with the ball core by a vulcanization process.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/SE 99/01664

A. CLASSIFICATION OF SUBJECT MATTER

IPC7: A63B 69/36

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: A63B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

WPI, EPODOC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	GB 401955 A (HARRY CUTHBERT DEANE), 23 November 1933 (23.11.33) --	1-5
A	US 3122369 A (O.D. WINDALL), 25 February 1964 (25.02.64) -- -----	1-5

☐ Further documents are listed in the continuation of Box C.☒ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

14 January 2000

Date of mailing of the international search report

07 -02- 2000

Name and mailing address of the ISA/

Swedish Patent Office

Box 5055, S-102 42 STOCKHOLM

Facsimile No. +46 8 666 02 86

Authorized officer

Johan Löfstedt / JA A

Telephone No. +46 8 782 25 00

INTERNATIONAL SEARCH REPORT

Information on patent family members

02/12/99

International application No.

PCT/SE 99/01664

Patent document cited in search report			Publication date	Patent family member(s)	Publication date
GB	401955	A	23/11/33	NONE	
US	3122369	A	25/02/64	NONE	

PATENT COOPERATION TREATY

PCT

NOTIFICATION OF THE RECORDING OF A CHANGE

(PCT Rule 92bis.1 and
Administrative Instructions, Section 422)

From the INTERNATIONAL BUREAU

To:

BJELKSTAM, Peter
Bergenstråhle & Lindvall AB
P.O. Box 17704
S-118 93 Stockholm
SUÈDE

Date of mailing (day/month/year) 31 July 2000 (31.07.00)	
Applicant's or agent's file reference PB/GB 42234	IMPORTANT NOTIFICATION
International application No. PCT/SE99/01664	International filing date (day/month/year) 22 September 1999 (22.09.99)

1. The following indications appeared on record concerning: <input checked="" type="checkbox"/> the applicant <input type="checkbox"/> the inventor <input type="checkbox"/> the agent <input type="checkbox"/> the common representative		
Name and Address HOMERANGE KB Kardanvägen 61 S-461 38 Trollhättan Sweden	State of Nationality SE	State of Residence SE
	Telephone No.	
	Facsimile No.	
	Teleprinter No.	
2. The International Bureau hereby notifies the applicant that the following change has been recorded concerning: <input type="checkbox"/> the person <input checked="" type="checkbox"/> the name <input type="checkbox"/> the address <input type="checkbox"/> the nationality <input type="checkbox"/> the residence		
Name and Address HOMERANGE AB Kardanvägen 61 S-461 38 Trollhättan Sweden	State of Nationality	State of Residence
	Telephone No.	
	Facsimile No.	
	Teleprinter No.	
3. Further observations, if necessary:		
4. A copy of this notification has been sent to: <div style="display: flex; justify-content: space-between;"> <div> <input checked="" type="checkbox"/> the receiving Office <input type="checkbox"/> the International Searching Authority <input checked="" type="checkbox"/> the International Preliminary Examining Authority </div> <div> <input type="checkbox"/> the designated Offices concerned <input checked="" type="checkbox"/> the elected Offices concerned <input type="checkbox"/> other: </div> </div>		

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Authorized officer <div style="text-align: center;">J. Leitao</div>
Facsimile No.: (41-22) 740.14.35	Telephone No.: (41-22) 338.83.38

COPY

PATENT COOPERATION TREATY

2000-08-14

PCT

**NOTIFICATION OF THE RECORDING
OF A CHANGE**(PCT Rule 92bis.1 and
Administrative Instructions, Section 422)

From the INTERNATIONAL BUREAU

To:

BJELKSTAM, Peter
Bergenstråhle & Lindvall AB
P.O. Box 17704
S-118 93 Stockholm
SUÈDE

Date of mailing (day/month/year) 31 July 2000 (31.07.00)	IMPORTANT NOTIFICATION
Applicant's or agent's file reference PB/GB 42234 42239	
International application No. PCT/SE99/01664	International filing date (day/month/year) 22 September 1999 (22.09.99)

1. The following indications appeared on record concerning: <input checked="" type="checkbox"/> the applicant <input type="checkbox"/> the inventor <input type="checkbox"/> the agent <input type="checkbox"/> the common representative								
Name and Address HOMERANGE KB Kardanvägen 61 S-461 38 Trollhättan Sweden	State of Nationality SE	State of Residence SE						
	Telephone No.							
	Facsimile No.							
	Teleprinter No.							
2. The International Bureau hereby notifies the applicant that the following change has been recorded concerning: <input type="checkbox"/> the person <input checked="" type="checkbox"/> the name <input type="checkbox"/> the address <input type="checkbox"/> the nationality <input type="checkbox"/> the residence								
Name and Address HOMERANGE AB Kardanvägen 61 S-461 38 Trollhättan Sweden	State of Nationality	State of Residence						
	Telephone No.							
	Facsimile No.							
	Teleprinter No.							
3. Further observations, if necessary:								
4. A copy of this notification has been sent to: <table border="0"><tr><td><input checked="" type="checkbox"/> the receiving Office</td><td><input type="checkbox"/> the designated Offices concerned</td></tr><tr><td><input type="checkbox"/> the International Searching Authority</td><td><input checked="" type="checkbox"/> the elected Offices concerned</td></tr><tr><td><input checked="" type="checkbox"/> the International Preliminary Examining Authority</td><td><input type="checkbox"/> other:</td></tr></table>			<input checked="" type="checkbox"/> the receiving Office	<input type="checkbox"/> the designated Offices concerned	<input type="checkbox"/> the International Searching Authority	<input checked="" type="checkbox"/> the elected Offices concerned	<input checked="" type="checkbox"/> the International Preliminary Examining Authority	<input type="checkbox"/> other:
<input checked="" type="checkbox"/> the receiving Office	<input type="checkbox"/> the designated Offices concerned							
<input type="checkbox"/> the International Searching Authority	<input checked="" type="checkbox"/> the elected Offices concerned							
<input checked="" type="checkbox"/> the International Preliminary Examining Authority	<input type="checkbox"/> other:							

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No.: (41-22) 740.14.35	Authorized officer J. Leitaö Telephone No.: (41-22) 338.83.38
---	---

PATENT COOPERATION TREATY

PCT

COPY

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference PB/GB 42239	FOR FURTHER ACTION	See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)
International application No. PCT/SE99/01664	International filing date (day/month/year) 22.09.1999	Priority date (day/month/year) 22.09.1998
International Patent Classification (IPC) or national classification and IPC ₇ A 63 B 69/36		
Applicant Homerange AB		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 3 sheets, including this cover sheet.

☐ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of _____ sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand 19.04.2000	Date of completion of this report 03.01.2001
Name and mailing address of the IPEA/SE Patent- och registreringsverket Box 5055 S-102 42 STOCKHOLM Facsimile No. 08-667 72 88	Authorized officer Åke Olofsson/ELY Telephone No. 08-782 25 00

Form PCT/IPEA/409 (cover sheet) (January 1998)

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/SE99/01664

I. Basis of the report

1. With regard to the elements of the international application:*

- ☒ the international application as originally filed
- ☐ the description:
 pages _____, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____
- ☐ the claims:
 pages _____, as originally filed
 pages _____, as amended (together with any statement) under article 19
 pages _____, filed with the demand
 pages _____, filed with the letter of _____
- ☐ the drawings:
 pages _____, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____
- ☐ the sequence listing part of the description:
 pages _____, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item. These elements were available or furnished to this Authority in the following language english which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☒ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheet/fig _____

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2 (c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item I and annexed to this report.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/SE99/01664

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	<u>1-5</u>	YES
	Claims		NO
Inventive step (IS)	Claims	<u>1-5</u>	YES
	Claims		NO
Industrial applicability (IA)	Claims	<u>1-5</u>	YES
	Claims		NO

2. Citations and explanations (Rule 70.7)

The present invention relates to a golf training arrangement. The arrangement comprising a golf ball which is used during the tee strike training. After the strike the ball is automatically returned with the aid of a substantially rigid line secured to the ball. The opposite end of the line is anchored to the ground at a predetermined distance in the front of the ball. A ring is slidable along said line and also on an elastic line extending substantially across said rigid line. For cooperation with said elastic line the free ends of which retaining the rigid line are resiliently halted and then returned. The rigid line does, along its front portion exhibit marked sections which indicate the distance from the ball to the ring, interconnecting the lines and to the crossing elastic line. The player will hereby informed about which club he is to use to realize the basic function of the arrangement, namely that the ball will returned to the tee location following a correct and perfect strike.

None of the documents cited in the international search report, or any combination of them, can be considered to anticipate the invention as defined in claims 1-5. The cited documents describe only the general state of the art, which is not considered to be particular relevance for the invention.

Therefore, the claims are considered to meet the criteria of novelty, inventive step and industrial applicability.